

E-MAIL SYSTEM PROVIDING FILTERING METHODOLOGY ON A PER-DOMAIN  
BASIS

ABSTRACT OF THE DISCLOSURE

An e-mail system is described that includes a flow control filter, which is particularly  
5 suited for filtering on a per-domain (host) basis. During processing of incoming e-mail, each  
child MTA process created to handle a particular new connection connects to a flow control  
filter service, so that it can interact with the service during arrival of a message. This  
interaction provides a complete description of the incoming client, including IP address and  
host name, as well as the complete SMTP interaction. Since the flow control filter service  
10 monitors all children processes, it attains a global view of traffic flowing through the system.  
By virtue of its global view, the flow control filter service can track information on a per  
domain basis, including total volume of e-mail received from a particular domain over a  
given period of time. Since the knowledge lost by the forking process is captured by the flow  
control filter service, the service is in a position to enforce policy-based rules, including  
15 placing restrictions on child processes, based on the per-domain tallies encountered.